DOCUMENT RESUME

ED 256 519 PS 015 143

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TITLE Egocentrism and Perception Dominance in Young Children: Implications for Development and Management.
PUB DATE 25 Feb 85
NOTE 17p.
PUB TYPE Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cognitive Ability; *Egocentrism; *Individual Development; Influences; Moral Development; Number Concepts; *Perception; Space; Speech; *Teaching Methods; Time; *Young Children
IDENTIFIERS *Developmental Patterns

ABSTRACT

The purpose of this paper is to review the intellectual traits of egocentrism and perception dominance in young children 2 through 7 years of age and to explain, in a concrete way, how these two characteristics interact to greatly influence their ability to form logical and stable concepts. A secondary purpose is to suggest activities that may stimulate the thinking operations of young children. The egocentric child's thinking is fixed on its own perspective and judgments are made primarily from that single view. Perception-dominated children cannot mentally make transformations or correctly size things up. They believe what they see, not what was or could be. Children who are egocentric view the passage of time in relationship to their preferred activities or needs. They tend to explain happenings from a personal perspective and do not look outside too often for more natural explanations. The speech of the egocentric child often centers on the content he or she is thinking or expressing. The egocentric concept of morality in young children presents a real challenge to child caregivers. Children's egocentricism often limits their ability to effectively cope with and express emotions in ways that are interpreted correctly by adults. Additionally, egocentricism and perception dominance make perception of three-dimensional and two-dimensional space problematic for the young child and influence the child's understanding and use of cardinal and ordinal numbers. (RH)

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EGOCENTRISM AND PERCEPTION DOMINANCE IN YOUNG CHILDREN: IMPLICATIONS FOR DEVELOPMENT AND MANAGEMENT

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Jean Piaget, the Swiss naturalist, has contributed to or stimulated a deluge of research and writing concerning the growth of the intellect. Often expressed in technical jargon and accompanied by rather ominous looking logic diagrams, classroom teachers (and parents) may not see the applications of these concepts for promoting development and managing behavior. The purpose of this paper is to review the intellectual traits of egocentrism and perception dominance in young children (years 2-7) and to explain, in a concrete way, how these two characteristics interact to greatly influence their ability to form logical and stable concepts. A secondary purpose is to suggest activities that may stimulate the thinking operations of young children.

Perhaps the most frequently mentioned intellectual characteristic of young children is that they are EGOCENTRIC. By this, it is meant that the child's thinking is fixed on its own perspective and judgements are made primarily from that single view. S/he cannot simultaneously consider a point of view while weighing another's. Of course, the child can adopt another perspective. For example, during play, if the child takes the role of a "fireman" or "mother" or "dad,"

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s/he "becomes" that person in effect. Very often the use of the term egocentric is interpreted to mean that the child is selfish emotionally or personally, but Piaget uses the term in an intellectual sense, meaning that the child's thinking is limited, cognitively, to one reference at a time.

PERCEPTION DOMINANCE is a trait which influences to a great extent what the young child sees (not necessarily what is sensed) or otherwise experienced. Usually, a larger perception or picture will capture the child's attention. A line of ten pennies spaced out in front of a child will probably hold greater value than a single dime placed in front of a child. Five ounces of Coke poured into a tall, slender beaker would probably be selected before seven ounces poured into a short, broad-based beaker. In effect, perception dominated children cannot mentally make transformations or correctly size things up. They believe what they see, not what was nor could be.

These two traits are characteristic of children between the ages of two and seven and will almost always filter their judgements. Such effects can be illuminated as we look at six basic concepts which all children experience early in growth--the notions of time, space, number, morality, cause and effect, and communication (speech). Of course, these effects vary by age levels and are more pronounced in three-year olds than they are in six year olds. The six or seven year-old has had an accumulation of growth and experience and is undergoing transition in thought. Experience and maturation are coming to the rescue.

TIME CONCEPTS

Children who are egocentric view the passage to time relative to their preferred activities or needs in general. It is a disconnected process rather than a continuously flowing event, centered on momentary events the child holds as important. One who has traveled any distance with children can recall the question, "Are we almost there yet?" Perhaps this occurs in the classroom as well as when a child asks, "Is it time for recess yet?" In effect what happens is that the young child is intellectually incapable of incorporating a time structure that is inconsistent with a personal perspective or need at any given moment.

Aside from developing some personal tolerance, what specific activities can be used which might move the child toward continuous time orientation? First of all, where possible, have a daily routine of activity that is reasonably predictable. Initially, this may lead them to associate time with certain events and to cue them to external schedules. Specific cues, visual or auditory, in the setting can be used to signal children when it is time for a particular event. For example, oral reading to the whole group might be cued beforehand by the ringing of a desk bell. Specific cues can be effective in situations where you want to end activities which are very pleasing and want to be continued by the children. Simply announcing the end of such an activity with a statement, "time is up," may not be operative for "egocentric youngsters." But external cues such as bells, switching off lights, and recorded tunes or tones, can be validated more concretely. Also, some youngsters are better "switchers" than others and can quickly

stop on cue. However, some are not so good at switching and need more transitional time. Build in a few extra minutes between scheduled activities.

Learning activities that have a sequence, such as cooking experiences with simple recipes, will require some order and timing on the part of the child. Simple activities such as predicting the passage of a minute using a stopwatch are interesting and informative. Another aspect of time-orientation is the use of large pictures (maybe five or six) illustrating people at various ages in life beginning as an infant and ending as a grandparent. Children can select the "oldest," the "youngest," or arrange them from youngest to oldest from a scrambled pile. Many varieties of these sets can be inexpensively constructed. Simply asking the children to guess the ages of the stimulus pictures provides some interesting results. Being exact or right is not the important product of these exercises. Causing the children to think and then to compare their thinking with peers affords an opportunity to add or subtract from their thoughts. Actually, the variance in response that would probably occur from such an exercise provides the content for thought.

When a group of kindergarten children were asked to describe "How to Cook a Turkey for Thanksgiving Dinner," some of their recorded remarks humorously describe their egocentric-time orientation.

> "Maybe I would pull the stuff out of the turkey and put some oil in it. Put it in the oven for pretty long, maybe four minutes."

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"You buy it and put salt on it and then let it set there for a while and then put some sugar on it to make it taste sweet. Then bake it for 84 seconds."

"If I were going to cook a turkey, I would cook it in the pressure cooker. First, I would put grease in the pressure cooker and take a spoon and stir it. Then if it wasn't done I would put it in the oven for 8 minutes."

"Put the stuffing in the back of it. Then put it in the oven for a long time, fifty hours."

Perhaps you have been in situations where you have said to a young child, "Wait a minute" or "I'll be there in a minute." But, the young child continues to press for attention until, when thoroughly annoyed, the parent and/or teacher explodes on the child. Again the passage of time for the young child is not connected to the "adult clock", but to their body (mind) and it is intellectually difficult for them to "see" that someone else is also in need. Usually, sending them to do something is more fruitful than having them standing by in neutral.

As you can see from these various examples, young children's orientation to time is sporadic and guided by their private logic.

CAUSE AND EFFECT RELATIONSHIPS

The egocentric "cause effector" tends to explain happenings from a personal perspective and doesn't look outside too often for more natural explanations. "It rained today because we were going on a picnic." "We have a big river so the boats that I look at can ride up and down it." Again, predictive exercises can be used to stimulate the child toward using thinking powers to explain cause-effect in more natural terms. "I wonder what would happen if we drop this piece of

chalk on the floor? On the rug? In the bucket of water?" Why do we have rain? This question posed to a group of children may bring a variety of responses, some of which may be very egocentric while others may be tinted with natural or logical explanations. Again, as they listen to others respond, children may add or subtract from their logic. Keep in mind that the emphasis is not on "technically correct answers" given by the teacher or other resources, but upon developing awareness of explanations that exist outside of one's private logic. Exactness or "scientific correctness" is not essential at this point. What is important is that the young child is exposed to stimuli or information that is somewhat discrepant from their status perception. Such a discrepancy can thrust one into a state of "disequilibrium," a need to reconcile personal and natural experience, and begin the process of connecting and validating experiences with natural causes.

EGOCENTRIC SPEECH

The child who is egocentric in speech often centers on the content what s/he is thinking or expressing. According to the child's logic, whatever is said should interest the listener but, who in turn, will usually not attend nor consider the content of another's remark. Together, they happily and comfortably jibber on. Intellectually, the child has one dimension of thought (self) and cannot simultaneously consider another's. One has to go; sometimes it may be theirs, but not often. Usually, this can be observed during "show and tell" or other listening activities when children show disinterest for the content their peers "show." Often irrelevant remarks are introjected by the audience in these settings. If the remark is somewhat related, then the enterprising teacher attempts to fit it into the discussion.

The completely irrelevant remark (which could have been logically triggered in the child's mind) should not be met with criticism nor punishment. Relating momentarily to the irrelevant remark (thank you, Johnny, for that information) and then bringing the children back to the point would seem less disruptive. There may be circumstances when an irrelevancy introduced may stimulate the children such that it is productive to pursue that line for its value. At times, simply ignoring the remark reduces the number of irrelevant interruptions, but can also extinguish the spontaneity of the children. Moreover, it would be very inappropriate to hastily conclude that a child at this age-level who exhibits these behaviors is "immature," "lacks manners or training," or doesn't "pay attention."

Another aspect of "egocentric speech" behavior is the interpretation of communication received from others. One example that readily comes to mind is the familiar response to children's request for a favor. "Mom, can we go swimming after lunch?" "Dad, will you play baseball with me?" Quite often, these questions are replied to with "we'll see;" "maybe later;" or "probably." Many of us, unthinkingly perhaps, use these kinds of responses when we really mean "no." However, to the young child, "maybe" responses very often mean "yes," because you didn't say "no." Consequently, when such requests are later denied, confrontation is inevitable.

The problem here is that young children cannot cognitively process the extenuating circumstances that may go along with probability statements. It would simply be much better to say "we

can't do that today" or "ask me after lunch" than to give a "maybe type response. The adult is communicating "I might; I might not," but the child is receiving "you will!"

At this point it is appropriate to introduce a distinction that can be made between "emotional egocentrism" and "intellectual egocentrism." Between the years of two and seven, egocentrism (whether it be speech, cause-effect, or number) is intellectually based. The child's cognitive structures (schemas) generate "single perspective thinking." Even after passing through a "transitional stage," egocentrism may still be observed in older youngsters (eight to twelve). However, at this point, it is likely that child-rearing outcomes and related personal and social experiences are primarily responsible. That is, the child is "intellectually capable" (has the necessary developmental thinking structures), but lacks the emotional stability or development to appropriately use the structures (emotional egocentrism).

MORALITY

The egocentric concept of morality in young children (knowing the difference between right and wrong) presents a real challenge to those who care for and manage young children. Piagetians (Bloom, 1959) identify two basic ways by which children judge rightness and wrongness; the "moral realist" who tends to judge primarily by "quantitative" measures, and the "moral relativist," who tends to judge by qualitative standards. For the realist, wrongdoing is measured by the magnitude of the act, rather than by circumstances.

Breaking five dishes while helping load the dishwasher is a greater crime than breaking one cup while snitching a goodie from the cookie jar. Judgements are characterized by what is seen; authority or belief is vested in the observable (act) rather than the non-observable (intentions). A first grader breaks a toy belonging to a classmate who happened to be absent from school that day. She responds, "It's all right because Bobby isn't here." Had Bobby been there chances are the response may have been quite different. (You may also recognize here an example of egocentric cause and effect.)

Perhaps all of us have fallen into the "rule trap." We establish ground rules at home or in class, but soon after modify or break them because of "circumstances." Quickly though we are reminded by the "moral realist" that we are not supposed to "eat between meals." Quite often we can become indignant or annoyed when corrected by children in these situations. Also, there are those children who intellectually become so "rule bound" that they often "tattle" on peers who break rules. How many times have we said hastily to the tattler, "Now, Mary, you worry about Mary and I'll worry about Johnny!" or "Johnny, how would you like it if Mary told on you?" Rather than being cross in these situations, we could accept such information (privately, if possible) and explain why you think the rule was broken (any extenuating circumstances).

Teachers often use (incorrectly) "infraction opportunities" to discuss the importance of "good behavior" and attempt to moralize about right and wrong. However, personal insights may be lost when

these discussions occur at the time of infraction. Generally, it is very difficult for the transgressor to think about their behavior (or misbehavior) when they are busy defending an action.

Young children have feelings, both positive and negative, which influence their judgements. Quite often their "egocentrism" limits their ability to effectively cope with and express emotions in ways that are interpreted correctly by adults. As they become older, information processing structures mature and their notions of morality are more relative to the situation. Such change can be noted by comments such as "Well, he didn't mean to do it," or "It really wasn't her fault; Johnny bumped her and caused the fishbowl to fall." But in the meanwhile, having experiences and activities that initially encourage and stimulate moral thinking can effectively move children toward a more relative sense of judgement. It is doubtful that all children can be categorized as a moral "realist" or relativist by simple age levels. Research has not yet shown clear a definite "shift" at seven or eight years of age. As always, the truth is somewhere inbetween, which will account for a variety of judgement behaviors.

SPATIAL AWARENESS

Egocentrism and perception dominance create for the young child "space problems." Usually lacking are notions of three-dimensional or two-dimensional understandings. Having one perspective (frontal or topographical) of space limits representational ability in construction or copying activities. Remember the egocentric child is dominated by what is seen. What is seen is the dimension in front of the eyes.

The egocentric "drawer" will lack perspective or logical (adult) arrangements in constructive art activities. Foreground and background coordination are usually absent. When the egocentric child examines or studies a three-dimensional model, the perception will be focused on the view in front of the eyes. Therefore, understanding the data on maps and globes will be greatly distorted (mountains, railroads, rivers). Even the idea of locating on a map the city in which they live may look ridiculous to them. "You mean that's where I live?" Don't be surprised if they don't believe you.

The child's ability to deal with three-dimensional understanding can be stimulated by various learning experiences. Combined verbal and motor activities can pave the way for the young child to appreciate and understand more of the physical world. Initially, the movements of the child's body are most important; the primary learning mode occurs per physical and motor movements. "Put your hands over your head; under your chin; on your toes." "Put your right hand between your legs; your left hand between your legs." "Move your arms around in a circle." Written exercises can follow the same format: "Make a circle around the blue ball;" "Make a line under the brown bear."

Construction activities with large 3-D wooden blocks or bricks allow the child to "feel and touch" space dimensions. Constructing 3-D objects with clay models after they have been removed (deferred imitation) provides the child an experience in representation and stimulates visual memory. An emphasis on dimensioning through subject matter and activity can provide the child with initial geometric experiences.

A simple observation of classroom or building construction will illustrate a variety of geometric figures. Large foam-rubber geometric figures are great for providing the tactile and visual experience. The starting point, however, is from the young child's notion of space (be careful not to use your plane of reference) which is oriented to the body; that is, body and space are one and the same. In many cases, the young child's adjustments to "plane perception" are made by body movements--they turn some part or all of the body to adjust. Most of us have seen a young child carrying in hand a glass of water across a room. If the child, for some reason, turns the head upward or downward (changing the plane, the hand will go toward that direction and the water spills. When doing seat work, young children often adjust or rotate their body to a favorable "space and plane" position around a desk. This is necessary for them to properly perceive or construct dimensions that are not in their "frontal" plane. Often this results in them wanting to stand up to do their work. In effect, adjustment of the body in helping to compensate for "egocentric" space perception.

NUMBER CONCEPTS

Egocentrism and perception dominance influence the child's understanding and use of cardinal (counting) and ordinal numbers (placements). Being able to count to 10 or even to 100 is not conclusive proof of the child's understanding. Many children simply have memorized, through practice, the counting sequence. Place 10 or 15 concrete objects in front of the child and have them count out the

number of objects. Don't interfere at this point; just observe. A "subjective counter" will not be able to coordinate the verbal and tactile responses. As they respond--"1, 2, 3, 4, 5,"--a discrepancy usually occurs between the number counted aloud and the number pointed to. Quite often these discrepancies can be quickly reduced through activities (teacher led) that require the children to coordinate counting (provoked correspondence). "How many cups of juice do we need today?" "Let's all count together." Setting the table for snacks offers an opportunity to coordinate the number of napkins and cups.

But the ability to coordinate counting does not guarantee the understanding of cardinal numbers. Children who are excellent "coordinate counters" may still be "perception dominated"--still oriented toward the larger perception. Several exercises (group or individual) can be used to check perception dominance. For example, place ten raisins (or peanuts, etc.) before the child in a horizontal line. Space them one-half inch apart. Ask, "How many raisins do we have?" Count with the child and confirm. Place an identical line of raisins five or six inches below the first set, keeping the exact spacings with the top line. Count and confirm this set with the child. Summarize with the child that you now have ten raisins in the top row and ten raisins in the bottom row, concluding that you have the same number in this row (top) as in this row (bottom). Take the line of raisins from the top and arrange them below (in full view of the child) into a circular or ring pattern. Ask the child, "Is there the same number of raisins here (top) as here (bottom)?" Quite often the "ego-

centric" learner will indicate that there is a greater number of raisins in the horizontal line (left intact) rather than in the "ring line." The reason for this discrepancy is that the child incorporates the spaces between objects into the perception and is mentally influenced by this longer perception. The circular group of raisins creates a much smaller perception and influences the child to think that there is less. There is inability to mentally "reverse" the disparate line of objects and "equalize" their number.

Since these traits are often found in first and second graders, they may experience difficulty solving mathematical problems involving reversibility. For example, the "egocentric" learner can solve through repetition and drill, the problem: [4] + [4] = [ ] or [::] + [::] = [ ]. But when reversed, such as [8] = [4] + [ ], these learners may experience difficulty processing the appropriate information. Those who respond that there is the same number in both sets have developed a basic understanding of the equivalence of sets concept. They are able to "reverse" or mentally transform elements about in spite of the disparate arrangements.

An understanding of ordinal number is necessary for children to relate objects or numbers in regard to "positions" where they may occur in a series. This skill is basic to the child's ability to understand verbal polarities, such as "first-last;" "big-little;" "loud-soft;" "hot-cold;" "more-less;" and the countless number of relational concepts that will be encountered later. Initially, it is not wise to introduce ordinal number (or cardinal numbers) with the

use of real numbers for the young child. Familiar concrete objects and materials may be more meaningful and reduce the abstraction of learning number concepts. For example, reading a short, interesting story where order and seriation are stressed (such as "Baking the Turkey") provides an opportunity to follow a sequence of events that are logically related and connected. "First, we need..., second, we do this," and last we add this..." If the introduction of the activity is then followed by actual involvement and doing, the learner then has the opportunity to validate the experience. It is better to start with a sequence which has a minimal number of steps to follow and then add as the learner's power increases.

SUMMARY

In summary, young children's thinking is characteristically different (not inferior) from both children and adults. Consequently, teaching, developing, and managing styles require an appreciation and tolerance of their associated responses and behavior. As adults, we can quickly mentally transform and understand the obvious, while at the same time (with all of our intellect) fail to mentally "get on our knees" to see the learning hurdles that young children must jump to build basic understandings. These understandings are not quickly developed, but evolve over a seasoned period of time.

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REFERENCES

Bloom, L. A Reappraisal of Piaget's Theory of Moral Judgement, Journal of Genetic Psychology, 95: 3-12.

Kohlberg, L. The Cognitive-Developmental Approach to Moral Development, Phi Delta Kappan, 1975, 56 (1): 671.

Phillips, John L., Jr. The Origins of Intellect Piaget's Theory., San Francisco: Freeman Press, 1975.